

The National NASA EPSCoR Program has released the National Aeronautics and Space Administration Office of STEM Engagement NASA Cooperative Agreement Notice (CAN) Established Program to Stimulate Competitive Research (EPSCoR) International Space Station (ISS) Flight Opportunity released on October 18, 2019.

This CAN is a limited proposal, meaning that Iowa can submit only one proposal for this CAN. The National NASA EPSCoR CAN solicitation will be released in mid-October 2019 with a single full proposal submission due on February 10, 2020. To allow sufficient time to select and develop a single strong full proposal from Iowa, a letter of intent is due **November 20, 2019**, and full proposals are due **January 9, 2020**. The LOIs will be used to select review panel members for internal competitive review. Those reviews will result in the selection of one proposal that will advance to NASA. The Iowa NASA EPSCoR Director, Tomas Gonzalez-Torres, will submit the selected proposal as the NASA PI and the researcher will be the science PI. The CAN is available in <u>NSPIRES</u>.

## Please review the CAN for proposal requirements and review criteria details.

It is anticipated that five (5) awards of up to \$100,000 each, to be expended over a three year period of performance, will be made under this Notice pursuant to the authority found at Title 2 CFR Part 200, Uniform Administrative Requirements, Cost Principles and Audit Requirements for Federal Awards, as adopted and supplemented by NASA through the NASA Grant and Cooperative Agreement Manual (GCAM), Appendix D, and 2 CFR Part 1800 (all available at http://prod.nais.nasa.gov/pub/pub\_library/srba/index.html). The exact number of awards depends on the available funding within the EPSCoR Research Budget.

The National Aeronautics and Space Administration (NASA) Office of Science, Technology, Engineering, and Mathematics (STEM) Engagement (OSTEM), in cooperation with the International Space Station (ISS) Research Office, Human Exploration & Operations Mission Directorate (HEOMD), Science Mission Directorates (SMD), Space Technology Mission Directorate (STMD), and NASA's nine Centers plus NASA's Jet Propulsion Laboratory (JPL), solicits proposals for the NASA Established Program to Stimulate Competitive Research (EPSCoR). Each funded NASA EPSCoR proposal is expected to establish research activities that will make significant contributions to the strategic research and technology development priorities of one or more of the Mission Directorates, and contribute to the overall research infrastructure, science and technology capabilities, higher education, and economic development of the jurisdiction receiving funding.

The selection will be a two-step process:

• In the first step, the proposals will be evaluated through an online NSPIRES peer review process by an ISS Program representative for flight feasibility and by the appropriate Mission Directorate representative for evaluation of ground-based results. There may be a



down-select of proposals at the conclusion of this step based on feedback from the ISS Program representative as to the supportability.

• During the second step, the proposals recommended for flight will be presented to the Mission Directorate review panel for funding recommendations.

NASA EPSCoR, through the jurisdiction's research projects, will provide the ground-based research. Proposed projects have previously been selected by NASA EPSCoR for ground based research funding. Approximately \$750,000 was provided by NASA and \$375,000 was provided by the jurisdiction or was vetted and funded by Mission Directorate Programs. All proposed projects shall be mature enough to transition to a flight experiment with little or no additional NASA funding.

For information regarding the review and selection processes, refer to pages 8-10 on the the NASA Cooperative Agreement Notice (CAN) -

Through this solicitation, the ISS will provide the integration and flight opportunity. There are a variety of laboratory facilities and capabilities designed to support a range of scientific disciplines on the ISS. A general overview of the research facilities and capabilities is at <a href="http://www.nasa.gov/sites/default/files/files/ISS\_Overview\_HSTI.pdf">http://www.nasa.gov/sites/default/files/files/ISS\_Overview\_HSTI.pdf</a>. ISS experts will evaluate each proposal's potential for integration and flight based on:

Criterion	Strong (10 pts)	Average (5 pts)	Weak (0 pts)
Feasibility	No impediment	Minor impediment	Major impediment
Time to hardware readiness	Less than 1 year	Less than 2 years	More than 2 years
Crew time	No crew involvement	Requires less than 1	Requires more than 1
requirements	beyond installation and	hour of crew	hour of crew
	removal	intervention per	intervention per
		increment period (6	increment period (6
		months)	months)
Power requirements	None	Less than 500w	More than 500w
Physical Space	Fits in 3U CubeSat	Fits in a single Express	Larger than a single
Requirements	(100mm X 100mm X	Rack Locker	Express Rack Locker
	340.5mm)		

\* Proposers are not required to fund launch costs. However, proposers shall fund the cost of their research equipment/hardware unless such hardware is already available in the NASA/ISS inventory. Proposers shall also be responsible for providing data for the required flight documentation. For guidance, please see this brief tutorial at <a href="http://www.nasa.gov/pdf/750523main\_How\_To\_Do\_ISS\_Research\_22\_May\_2013.pdf">http://www.nasa.gov/pdf/750523main\_How\_To\_Do\_ISS\_Research\_22\_May\_2013.pdf</a> (specifically the inputs required on pages 5 through 8).



The ISS Program will develop a payload unique Applicable Verification Matrix, identifying all of the required and recommended design interfaces and associated verifications. NASA test facilities may be utilized by the Payload Developer (PD) to complete verification testing; however, it is the PD's responsibility to cover all costs associated with this testing, unless otherwise documented in their Payload Integration Agreement (PIA). For further explanation of these products, please contact Willie Williams at <u>willie.b.williams@nasa.gov</u>.

**Funding:** The maximum funding request per proposal is \$100,000. This amount is to be expended over a three-year period.

- There is no cost share requirement for this opportunity.
- Please read the full SOLICITATION for all relevant details. \* Download PDF

**STEP 1** - Submit Letter of Intent (LOI) Online: **Due November 20th, 2019, 5:00 pm CST**. CLICK <u>HERE to submit LOI</u>.

**STEP 2** - Submit Proposal: **Due January 9, 2020, 5:00 pm CST**. Please submit a single PDF document using the naming convention: PI Last Name\_First Name\_NASA\_CAN. Submissions that are incomplete will not be reviewed and no late submissions will be accepted. The winning proposal will be submitted to NASA by the ISGC Director as the NASA PI by **February 10, 2020**. Please use the proposal submission guidelines in the CAN.

Proposals will be reviewed based on these criteria:

- Intrinsic merit of microgravity requirement (i.e., what is the added value of flying on the ISS?);
- Approach to flight safety process; and utilization requirements of available ISS resources; and
- Budget (shall be adequate, appropriate, reasonable, and realistic, and demonstrate the effective use of funds that align to the proposed project).

The proposal submitted to NASA will be evaluated by ISS Program personnel based on the following (reference section 4.2.4 of the <u>CAN</u> for additional details):

- Feasibility;
- Time to flight;
- Crew time requirements;
- Power requirements; and
- Physical Space requirements.

Upon completion of the Iowa Internal review, selected proposers will be invited to submit a final proposal as described in the solicitation. The selected Iowa proposal shall be submitted electronically via NSPIRES (<u>http://nspires.nasaprs.com</u>) by the Iowa NASA EPSCoR Director in cooperation with the proposing science PI. Hard copy proposals will not be accepted. Electronic proposals shall be submitted in their entirety by **11:59 p.m., Eastern Time on February 10, 2020.** 



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